

Docket No. 2001-005-DSK

## ABSTRACT OF THE DISCLOSURE

### APPARATUS AND METHOD FOR INSTANT COPY OF DATA

5 A system is provided to support dynamically  
changeable virtual mapping schemes in a data processing  
system. The present invention separates processing of  
data unit requirements from the selection of which  
storage subsystems to use for storage by using a storage  
10 methodologies inventory. A stored data management  
subsystem contains one or more hosts. A plurality of  
data storage elements is functionally coupled to the one  
or more hosts. The plurality of data storage elements is  
organized using a plurality of layers of mapping tables.  
15 The plurality of layers of mapping tables provides unique  
identification of location of the data such that  
individual data entries in a mapping table is variable  
and self-defining with respect to the amount of data  
managed. In addition, the present system provides  
20 various instant copy mechanisms for copying data upon  
receiving a write operation to either a source or copy  
data. The instant copy mechanisms may be selected based  
on the type of mapping originally used to store the data  
that is to be copied.